Creation Matters

Fall 2025
Volume 30 Number 4

A publication of the
Creation Research Society

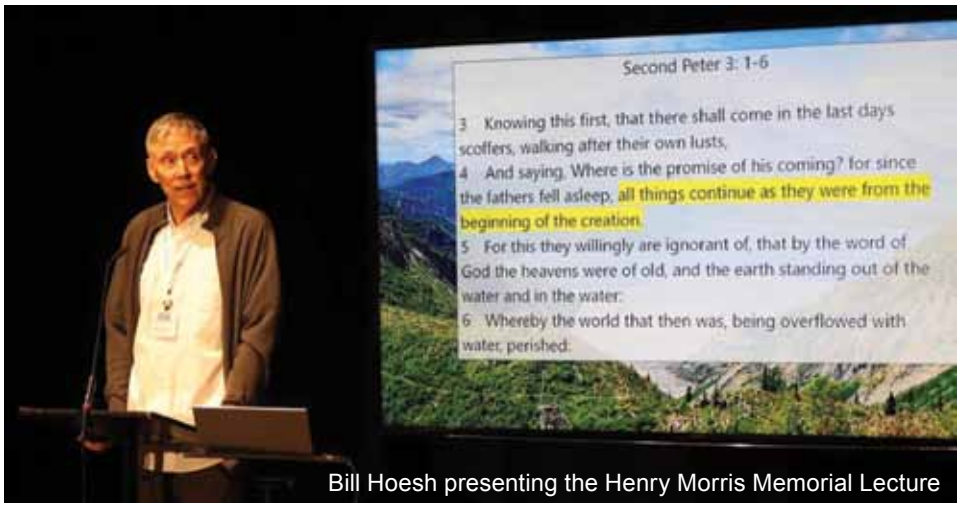
The 2025 CRS Conference

by Lindsay Harold

The CRS conference this year was held at Missouri Baptist University in St. Louis, Missouri on July 24-26. There were 185 attendees from all across the United States as well as from Canada, South Africa, and the UK.

The workshops on Thursday were a great success. There were geology, biology, and astronomy options with hands-on projects and discussion focused on advancing creation science within each field. The reception on Thursday evening was a marvelous time of food, fellowship, and conversation. The food this year was excellent. Meals were included with conference admission, which was convenient and helped to encourage everyone to make new connections and renew old friendships while dining together.

Conference presentations took place on Friday and Saturday. Plenary presentations got the conference underway each day, followed by 3 tracks of concurrent sessions. Friday's plenary was presented by Jake Hebert on recent evidence for greater longevity in pre-flood animals. Hebert suggests that humans may not have been the only creatures which experienced greater longevity in the original creation or whose lifespans decreased after the flood. Giant fossils and growth ring studies may indicate delayed maturation, larger body size, and longer lifespans in a number of pre-flood and early post-flood animal specimens.


Second Peter 3: 1-6
3 Knowing this first, that there shall come in the last days scoffers, walking after their own lusts,
4 And saying, Where is the promise of his coming? for since the fathers fell asleep, all things continue as they were from the beginning of the creation.
5 For this they willingly are ignorant of, that by the word of God the heavens were of old, and the earth standing out of the water and in the water:
6 Whereby the world that then was, being overflowed with water, perished:

Bill Hoesh presenting the Henry Morris Memorial Lecture

The Henry Morris Memorial Lecture was presented Friday evening by Bill Hoesh. This informative lecture was open to the public and entitled *In the Wilderness: Creation Science Then and Now.* Hoesh covered some of his recollections of Henry Morris as well as some lesser-known findings from the Mount St. Helens eruption and how this relates to creation science models. Bill Hoesh joins a long list of friends and colleagues of Henry Morris who have contributed to this series of lectures. Past presenters include Ken Ham, John Whitcomb, Duane

See **Conference** *on page 4*

CRS Fellow

Society Awards Second Posthumous Fellow

by Robert Carter, CRS Membership Secretary

At our meeting in 2024, the Board of Directors nominated Dr. Ken Funk to be a Fellow of our society. This is an honor that has only been bestowed 28 other times since the founding of the CRS in 1965. We could not vote on it until the meeting of the Board this past June, and so, sadly, we were not able to honor him before his passing (on 28 May 2025). Ken was a tireless advocate for biblical creation, and his work with the Midwest Creation Fellowship, specifically, will have lasting impacts on many lives. Ken and his wife Connie also made significant financial contributions to the CRS, which helped us tremendously during our relocation from the old facility in Prescott Valley, AZ to our beautiful new laboratory and office space at Arizona Christian University in Phoenix.

Ken attended Moody Bible Institute, graduated from Houghton College with a BS in chemistry, and obtained a MS and PhD in organic chemistry from Case-Western Reserve University. His work with synthetic amino acid and peptide chemistry led to a career at Abbott Laboratories, where he was involved in the development of Lupron (leuprolide), an analog of GnRH (gonadotropin releasing hormone) that is used for the treatment of prostate cancer, endometriosis, uterine fibroids, and precocious puberty. His papers, patents, and book chapters have contributed to the advancement of both science and human health.

He was interviewed for *Creation* magazine in 2014.[1] I found this both interesting and encouraging, and his article on *The Creation Information Barrier*,[2] published in 2024, is a must-read.

Ken's name has been added to a beautiful plaque that hangs prominently in the CRS office. As long as I am involved in the Society, I will be seeing his name. That will serve as a constant reminder of the friend who has gone on before me. Let's remember his example as we seek to serve the Lord with our time and finances, trusting that He will use us as He sees fit.

CM

1 Bates, G. 2014. Is God left-handed? Gary Bates interviews peptide chemist Ken Funk Ph.D. *Creation* 36(1):32–34. creation.com/god-left-handed

2 Funk, K. 2024. The creation information barrier. *Creation.com*. creation.com/creation-information-barrier

Table of Contents

The 2025 CRS Conference 1
CRS Fellow 2
God's Microscopic Gift for Mankind 3
Math Matters 5
Prayer Matters 8

Creation Matters

ISSN 1094-6632
Volume 30, Number 4, Fall 2025

Copyright © 2025 Creation Research Society
All rights reserved

Editor: Lindsay Harold
Assistant Editor: Cheri Fields
Layout Services: Guy Forsythe, guy@cryingrocks.com

Creation Matters is a publication of Creation Research Society, 1 W. Firestorm Way #145, Glendale, AZ 85306, www.creationresearch.org

Article submissions and inquiries for *Creation Matters* can be addressed to CMeditor@creationresearch.org

Articles published in *Creation Matters* represent the opinions and beliefs of the authors, and do not necessarily reflect the official position of the CRS.

Desmids: God's Microscopic Gift for Mankind to View and Admire

by Reed Green

When I was an undergraduate at the University of Arkansas, my faculty advisor, soon to be graduate research advisor, Dr. Richard L. Meyer, the Phycologist in the Botany department, introduced me to the desmids, a type of microscopic green algae. I was fascinated by Dr. Meyer's copy of the 1848 publication *The British Desmidieae* by John Ralphs (1807–1890). I recently found and purchased an original copy of Ralphs' book to add to my library. Ralphs shared in this book an introduction I revered and have never forgot:

> *What the Allwise did not disdain to create cannot be unworthy of our notice; and if in the minute Desmidieae, so long concealed from the unassisted eye, we have been at length enabled to recognize objects as carefully organized as the bulky elephant or the majestic oak, and as happily adapted to their position in nature, possessing too an economy whose laws are no less constant and regular, shall we not gladly examine this fresh evidence of an Almighty hand, as distinctly impressed on them as on the rest of his creation?*
>
> *'To Him no high, no low, no great, no small; He fills, He bounds, connects and equals all.' (Alexander Pope, 1733–1734)*

Ralphs (1848) describes the desmids in this way.

> *The Desmidieae are of an herbaceous green colour; a few only of the Closteria have the integument coloured, but in all the internal matter is green. All the family are inhabitants of fresh water. … Their most obvious peculiarities are the beauty and variety of their forms and their external markings and appendages; but their most distinctive character is the evident division into two valves or segments. Each cell or joint in the Desmidieae consists of two symmetrical valves or segments, and the suture or line of junction is in general well-marked.*

Desmids are a group of freshwater microscopic (some macroscopic) green algae that have an atypical mode of sexual reproduction called conjugation (Wehr et al., 2015). Desmids are currently classified within the taxonomic order Conjugatophyceae (also called Zygnematophyceae). Members of the Conjugatophyceae form sexual (2x) spores (zygospores) through the union (conjugation) of cytoplasm from two different cells (gametes).

Ecologically, related to water quality, the presence of planktonic desmids are considered a high-quality indicator (Katsiapi et. al., 2016).

An interesting feature within the Conjugatophyceae is that there are no flagellated stages within their lifecycle. Desmids do not contain centrioles used in separating the chromosomes during mitosis.

The genera within the Conjugatophyceae are very morphologically diverse, including filamentous, unicellular, and colonial forms. The number of currently described species within the Conjugatophyceae is around 3,500 species (Guiry, 2013, 2023).

Traditionally, the Conjugatophyceae are divided into two orders and six families (Guiry, 2013; Wehr et al., 2015), and those of uncertain placement (Guiry, 2013).

Order – Zygnematales

Family – Mesotaeniaceae, Zygnemataceae

Order – Desmidiales (Desmids)

Family – Closteriaceae, Desmidiaceae, Gonatozygaceae, Peniaceae

Desmids are beautiful, microscopic, single-celled green algae containing two symmetrical (mirror image) semicells (Figure 1). Some are filamentous and others form colonies. Some are even macroscopic, visibly seen within axenic cultures. They exhibit many remarkable shapes and ornamentation, if for nothing else, for us to view their amazing beauty (Digicodes, 2022).

The fine line between the two semicells is called the isthmus. The nucleus in a desmid cell fits between the two semicells at the isthmus. Desmids contain two chloroplasts, one in each semicell that fill the volume of the semicell. The chloroplasts contain pyrenoids, which are starch-forming systems.

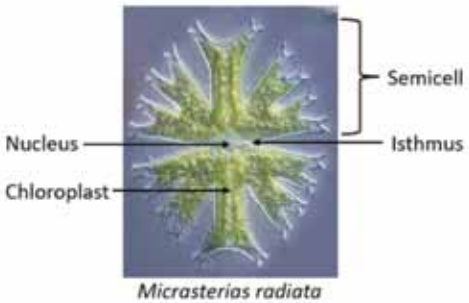


Figure 1. Anatomy of a common desmid, *Micrasterias radiata*. Photo by Ibaraki Tsuchiura. Wikimedia Commons CC BY-SA 2.5. Labels added by Reed Green.

Cell division (mitosis) occurs at the isthmus where the nucleus is located. Each semicell forms a new (mirror

See **Desmids** *on page 5*

Conference

continued from page 1

Gish, Gary Parker, Frank Sherwin, John Morris, Steve Austin, Kenneth Cumming, Don DeYoung, Russ Humphreys, and Andy MacIntosh.

Saturday's plenary session was led by Joe DeWeese and introduced the multi-disciplinary collaboration effort among a growing group of YEC scientists who plan to extract and sequence dinosaur DNA and other supposedly ancient DNA from fossils. Thus far, the project has been developing methods to extract and sequence DNA from fossils and to identify and potentially assemble dinosaur sequences if they are found. This is still very much a developing field, and much is yet unknown about how best to accomplish this goal, especially on a budget. Given the lack of an extant representative of dinosaur kinds, confirming that any DNA sequences originated from the dinosaur rather than from contamination is also a challenge. Several of the concurrent sessions at the conference also covered the topic of finding dinosaur DNA. Many of these researchers are joining the collaboration effort. We look forward to hearing updates as further developments arise.

The concurrent sessions were filled with a wide variety of informative talks from biology, geology, astronomy, paleontology, and archaeology fields. Multiple presentations used an engineering approach to study design in living things from the perspective of purpose and design constraints. In a physical universe having predictable and consistent physical laws, solving various problems will require optimizing specific parameters within design constraints, even for an all-powerful, divine Creator. We can study the engineering genius of God through what He has made and use that knowledge in our own designs.

Several presentations this year challenged attendees to reconsider arguments that many YECs have made in the past, including the "sauropod" petroglyph at Kachina Bridge, the identification of "Lucy" as an extinct ape, and the use of potentially contradictory or problematic explanations in cosmology. Though somewhat controversial at times, the challenge to reexamine ingrained positions and not fall into confirmation bias or build an echo chamber is valuable, whether or not we agree with the conclusions of any particular researcher. This conference had a lot of iron sharpening iron.

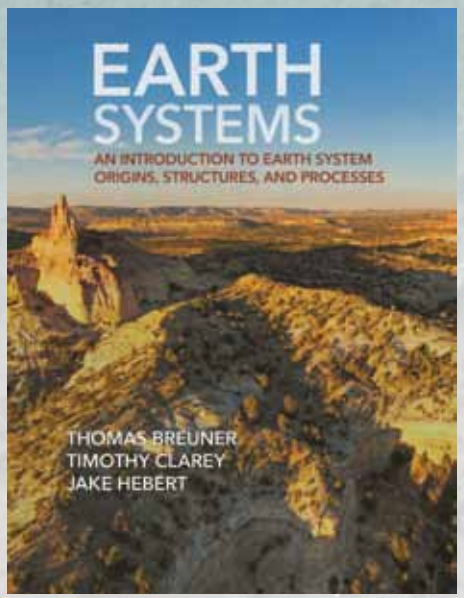
Another repeated theme among presentations was delineating the limits of created kinds. The study of baraminology has been adding a number of statistical tools and other techniques in recent years that have contributed new avenues for research.

The conference concluded on Saturday evening with an indoor picnic and time of fellowship. There was widespread agreement that the presentations this year were excellent and helped to make this conference an extremely productive and informative event. Abstracts from conference presentations will be published in the CRSQ.

We praise God for his amazing creative work and thank Him for His grace and love. We also appreciate the many researchers who have worked so hard to study the physical world God made and to bring Him glory through their discoveries. After such a great conference this year, we are eagerly anticipating the 2026 CRS conference. You won't want to miss it!

Available in the CRS Bookstore

Earth Systems: An Introduction to Earth System Origins, Structures, and Processes



By: Thomas Breuner, Timothy Clarey, and Jake Hebert

Since the late eighteenth century, most scientists have argued for a uniformitarian view of Earth's history. They claim the world that exists today was sculpted by natural processes over billions of years. However, this interpretation presents many issues both scientifically and theologically. Contrary to popular belief, the global evidence indicates a recent catastrophic past.

Earth Systems: An Introduction to Earth System Origins, Structures, and Processes equips students with a biblical understanding of Earth science. The three authors include experienced researchers and professors who have deeply studied geology, meteorology, oceanography, climatology, and more. Filled with practical information and colorful visuals, this undergraduate-level textbook is designed to reinforce a Christian worldview in the classroom and beyond.

Institute for Creation Research. 2025. 446 pages.

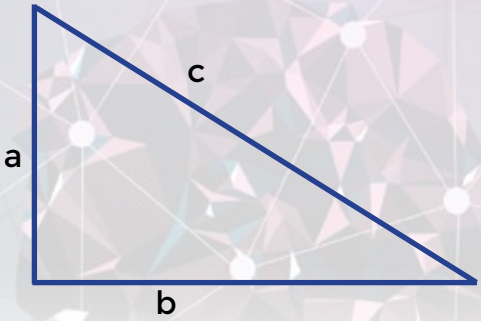
www.creationresearch.org/store • 877-CRS-BOOK

Math Matters

Pythagoras and the Language of Creation

by Don DeYoung, PhD

Many readers are familiar with the expression connecting the sides of a right (90°) triangle, $a^2 + b^2 = c^2$. Whole number examples include $3^2 + 4^2 = 5^2$ and $5^2 + 12^2 = 13^2$. There are many proofs of this theorem, attributed two millennia ago to Pythagoras of Samos, Greece. He lived ca. 570-490 BC, roughly the time of Old Testament Daniel. The math theorem has a novel extension for taxis in New York City where streets are arranged in a square grid pattern. The diagonal distance c is traversed by using the perpendicular roads a and b. Thus, the taxi fare for traveling the distance c is computed by a + b = c without squaring the terms.



Pythagoras correctly taught that the universe is described by mathematical rules. Math is indeed the language of creation, extending throughout the physical universe. However, early Greek society was permeated with multiple gods along with endless philosophical discussion. Pythagoras seems to have claimed semi-divine status similar to the god Apollo. He also promoted reincarnation and claimed to remember his former lives. Any personal interaction by Pythagoras with Old Testament history is unknown. There is limited information on his spiritual life and there are no surviving writings.

Pythagoras explored musical chords, earth's spherical shape, motions of the known planets, and world climate zones. He founded a school dedicated to a communal, ascetic lifestyle called Pythagoreanism. Early church leaders Eusebius, Jerome, and Augustine commended Pythagoras for his legacy of moral teachings in a pagan society.

I suggest that the legacy of Pythagoras has similarities to some of the leading scientists of our own day. These men and women are highly honored for their intellect and research success; however, most offer no public testimony of faith or recognition of their Creator. I once asked my graduate school physics professor his thoughts on religion. His reply: "If personal faith works for you, fine. I am too occupied to be bothered with such details." Sadly missing here is the true motivation for scientific discovery as described in Proverbs 25:2, "It is the glory of God to conceal a matter; to search out a matter is the glory of kings." That is, scientific research should be a godly and humble pursuit.

Desmids

continued from page 3

image) semicell. The new semicell starts out ameboid-like but soon takes on the shape of the other semicell as the cell wall forms. So, in effect, each mature desmid contains two generations of offspring. (A video showing cell division of a desmid can be viewed at www.youtube.com/watch?v=AqbGi8VXqo8)

Sexual reproduction occurs in desmids through conjugation in which two individual desmids will line up together at their isthmus. The semicells will separate at the isthmus and the nuclei from each protoplasm will fuse together (conjugate) and from a 2n zygospore. The zygospore will generally undergo meiosis and form four new haploid (1n) desmids. However, this is not always the case. Polyploidy is often found in the Desmidiales and Zygnematales in the vegetative and zygospore stages (Kallio, 1951, 1953; Starr, 1958; Brandham, 1964, 1965; McCourt et. al., 1986, 2000; Pouliekova et. al., 2014; Feng et. al., 2024). Polyploidy is considered to be a driver in long-term evolutionary transitions and biological complexity (Van de Peer et. al., 2017).

Selective members of the order Desmidiales

Within the family Closteriaceae and genus *Closterium*, *Closterium lunula* is the designated type species (Guiry, 2013). Wehr (2015) describe the genus *Closterium* as "solitary cells, usually straight, arcuate, or lunate; the cells taper towards the apices, which may be pointed, broadly rounded, or truncated."

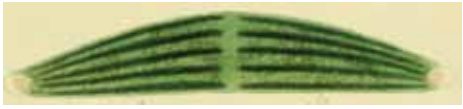


Figure 2. *Closterium lunula* - Ralphs, 1848, Table XXVII, figure 1. Public Domain.

Within the genus *Cosmarium*, *Cosmarium margaritiferum* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Cosmarium*

See **Desmids** *on page 6*

Desmids

continued from page 5

as a "species rich taxon that includes a wide variety of structurally dissimilar species. The cell walls are ornamented with spines, granules verrucae, scrobiculations, crenations, and pores, often elegantly arranged in the center or along the margins."

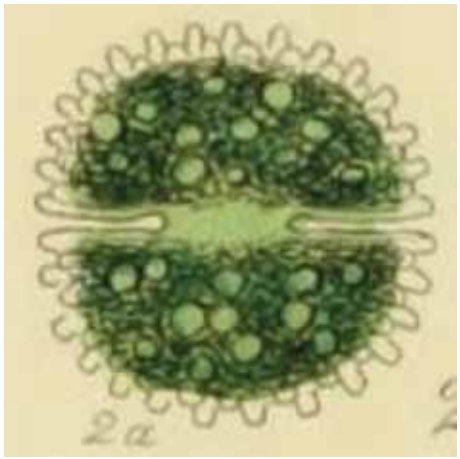


Figure 3. *Cosmarium margaritiferum* – Ralphs 1848, Table XVII, figure 2a. Public Domain.

Within the genus *Euastrum*, *Euastrum ansatum* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Euastrum* as "…. solitary cells and generally deeply constricted in the midregion. Semicells are often subrectangular or trapeziform, but may be nearly triangular in front view. Cells are ellipsoid or nearly rectangular in the apical view."

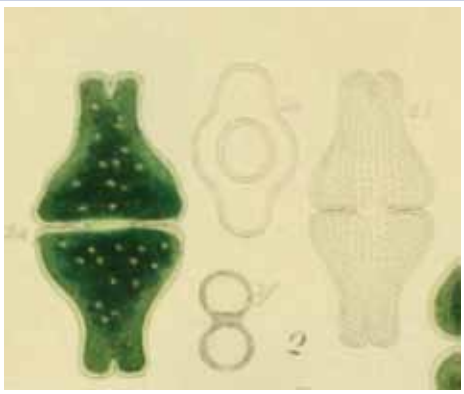


Figure 4. *Euastrum ansatum* – Ralphs 1848, Table XIV, figure 2a, c, d, and f. Public Domain.

Within the family Desmidiaceae, genus *Hyalotheca*, *Hyalotheca mucosa* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Hyalotheca* as "...cells joined together along their apices to form filaments. The cells are cylindrical—rectangular in lateral view and circular in apical view with a subtle indentation around the midregion. In some species, cells have very small processes (usually two or three) in the midregion that appear as slight bumps. Rows of pores surround the cells along the apices."

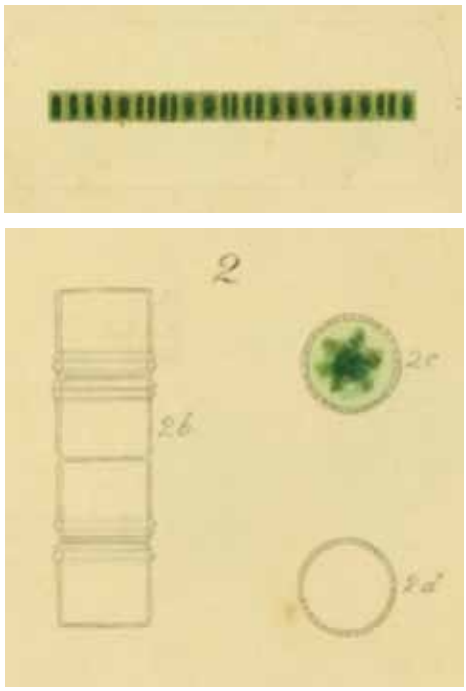


Figure 5. *Hyalotheca mucosa* – Ralphs 1848, Table I, figure 2a and 2d. Public Domain.

Within the genus *Micrasterias*, *Micrasterias furcata* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Micrasterias* a "group of large, beautiful species. … The cell outline is often circular, but may be trapeziform or nearly rectangular. The cells are deeply constricted and dorsiventrally compressed. The Semicells are dissected into a polar lobe and lateral lobes. These lateral lobes may be themselves dissected many times, sometimes to the fifth order. The surface of the semicell may be smooth or ornamented with spines. In apical view, cells are elongate ellipsoid."

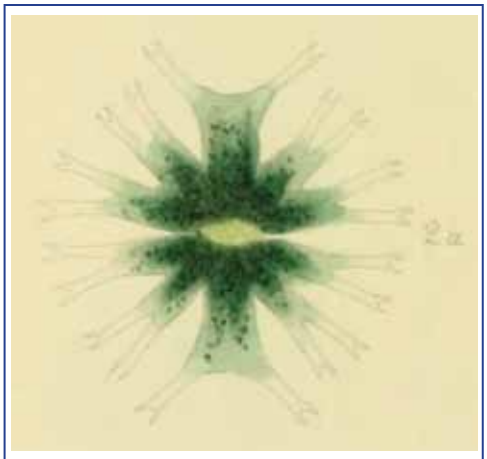


Figure 6. *Micrasterias furcata* – Ralphs 1848, Table IX, figure 2a. Public Domain.

Within the genus *Staurastrum*, *Staurastrum paradoxum* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Staurastrum* as "Cells are solitary and two- to many-angled in apical view. The cell shape is variable depending on species, but most species are deeply constricted with ellipsoid, spheroid, or polygonal semicells. In most species, the angles of the cells are drawn out into compound spines, lobes, or long cellular extensions called processes. The processes may be themselves ornamented with granules, verrucae, or spines."

Within the genus *Xanthidium*, *Xanthidium aculeatum* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus Xanthidium as "The cells are ellipsoid, rectangular, or polygonal in front view and usually ellipsoid in apical view. The angles are furnished with paired spines."

Within the family Peniaceae and genus *Penium*, *Penium brebisson* is the designated type species (Guiry, 2013). Wehr (2015) describes the genus *Penium* as "Cells are solitary, cylindrical, and elongate. The semicells taper toward broadly rounded apex. There is no distinct isthmus in the midregion, but there is often an obvious suture and girdle bands."

Continued on next page

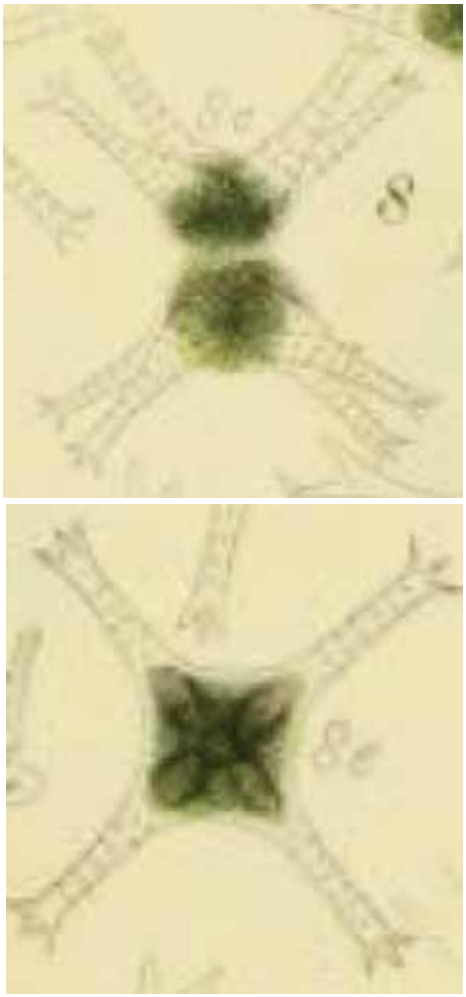


Figure 7. *Staurastrum paradoxum* – Ralphs 1848, Table XXIII, figs. 8c and 8e. Public Domain.

Collecting Desmids

Desmids are found in fresh, clearwater environments. Many are planktonic, but most are found in shallow, littoral waters associated with aquatic macrophytes. Few inhabit slightly brackish waters. The best technique for sampling desmids is to locate submersed or emergent vegetation, close to the shoreline of a lake, reservoir, pond, or wetland. Pick some of the aquatic vegetation with your hands and squeeze the water into a sample bottle. If using a phytoplankton tow net, throw it out into the vegetation and pull it through the vegetation. You'll be amazed with what you find.

The desmids were meant to be observed and studied by mankind as more evidence of His glorious creation. To God be the Glory!

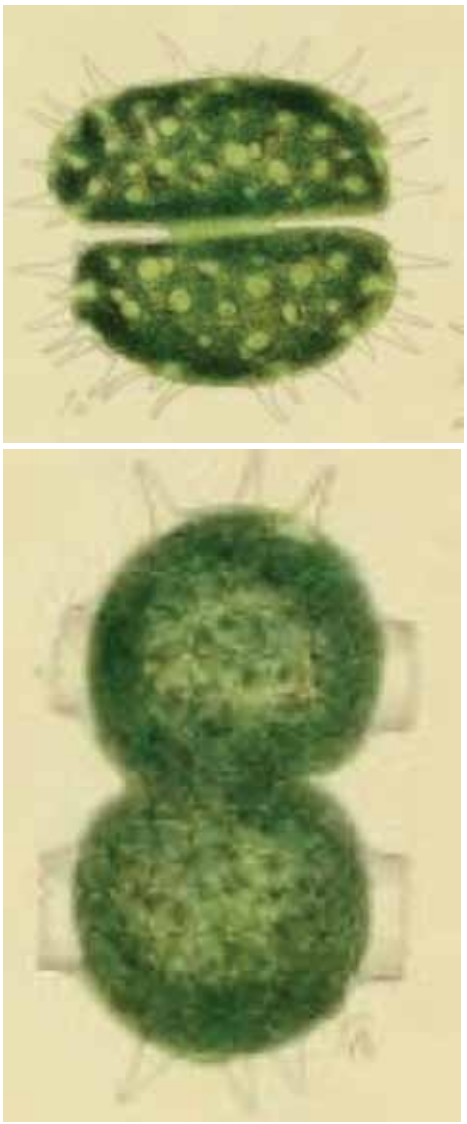


Figure 8. *Xanthidium aculeatum* – Ralphs 1848, Table XIX fig. 1a and 1h. Public Domain.

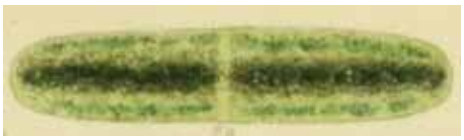


Figure 9. *Penium brebisson* – Ralphs 1848, Table XXV fig. 6a. Public Domain.

References

Brandham, P.E. 1964. Polyploidy in desmids. *Can. J. Bot*. 43: 405-417.

Brandham, P.E. 1965. Some new chromosome counts in the desmids. *British Phycological Bulletin* 2(6): 451-455. DOI:10.1080/00071616500650061

Digicodes. 2022. www.digicodes.info/index.html

Feng, Z., et al. 2024. Genomes of multicellular algal sisters to land plants illuminate signaling network evolution. *Nature Genetics* 56: 1018–1031. DOI:10.1038/s41588-024-01737-3

Guiry, M.D. 2013. Taxonomy and nomenclature of the Conjugatophyceae (=Zygnematophyceae). *Algae* 28(1): 1-29, DOI:10.4490/algae.2013.28.1.001

Guiry, M.D. 2023. *AlgaeBase*. www.algaebase.org.

Kallio, P. 1951. The significance of nuclear quantity in the genus *Micrasterias*. *Ann. Botan. Soc. Zoo. Botan. Fennicae Vanamo* 24(2): 1-122.

Kallio, P. 1953. The effect of continued illumination on the desmids. *Zrch. Soc. Zool.-Bot. Fenn. Vanamo* 8(1): 58-74.

Katsiapi, M., et al. 2016. Assessing ecological water quality of freshwaters: PhyCoI—a new phytoplankton community index. *Ecological Informatics* 31: 22-29.

McCourt, R.M., et al. 1986. Distribution, morphological diversity and evidence for polyploidy in North American Zygnemataceae (Chlorophyta). *J. Phycol*. 22: 307-315.

McCourt, R.M., et al. 2000. Phylogeny of the conjugation green algae (Zygnemophyceae) based on rbcL sequences. *J. Phycol*. 36: 474-458.

Pouliekova, A., et al. 2014. DNA content variation and its significance in the evolution of the genus *Micrasterias* (Desmidiales, Streptophyta). *PLoS ONE* 9(1): e86247. DOI:10.1371/journal.pone.0086247

Ralphs, J. 1848. The British *Desmidieae*. Reeve, Benham and Reeve, London, 226 pp. https://archive.org/details/britishdesmidiea00ralf/mode/2up

Starr, R.C. 1958. The production and inheritance of the triradiate form in *Cosmarium turpinii*. *American Journal of Botany* 45(3): 243-248.

Van de Peer, Y., et al. 2017. The evolutionary significance of polyploidy. *Nature Reviews Genetics* 18(7): 1-14.

Wehr, J.D., et al. 2015. *Freshwater Algae of North America*. 2nd ed. Academic Press, Elsevier, 1050 pp.

Creation Research Society
Research is our middle name

Creation Research Society
Research is our middle name

1 W. Firestorm Way #145
Glendale, AZ 85306
USA

Prayer Matters

Praise: We thank God for an amazing and productive conference.

Prayer: Please pray for the success of the dinosaur DNA endeavor which involves many researchers from across the society. We need reasonable success this year to justify a full-scale endeavor starting in 2026 (Lord willing). Pray for open doors and contacts to acquire dinosaur samples from arctic climates for protein and DNA analysis.

Pray for a successful start of the new semester for the Van Andel Creation Research Center at Arizona Christian University. The VACRC has five undergraduate interns this year (our most ever). Pray the two senior undergrads will be wise leaders and the three juniors will be quick studies.

Thanks Again!